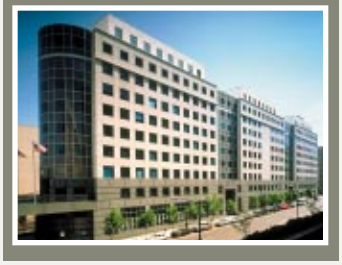
A national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy

NREL National Renewable Energy Laboratory

Innovation for Our Energy Future

Join us the second Thursday of every month for a series of "brown bag" seminars, sponsored by the National Renewable Energy Laboratory and the U.S. Department of Energy. Each seminar is held at NREL's Washington office with a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.



Energy Analysis Seminar Series

A "brown bag" analytical seminar series

Understanding the Economic Value of Electricity Storage: Some Key Drivers

Thomas Jenkin, Senior Analyst
National Renewable Energy Laboratory

Thomas Jenkin

Thursday, November 18, 2004
Noon – 1 p.m. (in Washington, D.C.)
10 – 11 a.m. (videoconference in Golden, Colo.)

The use of electricity storage provides several potential benefits. These can include energy arbitrage ("buy low, sell high"), improved generation and transmission utilization, deferred transmission and generation requirements, and a number of grid-stability services. During this presentation, Thomas Jenkin will provide an introduction to electricity storage and address a number of key factors affecting the value of storage. Topics will include:

- Estimating the arbitrage value of electricity storage (for small and large devices)
- Insight on operation of real electricity storage devices, such as pumped storage
- The impact of high natural gas prices on the relative value of electricity storage
- Other renewable issues and a brief discussion of a hybrid storage technology using compressed air (known as CAES)

Note: Thomas Jenkin's presentation is based on work and analysis performed prior to his joining NREL.

Thomas Jenkin is a senior analyst at the National Renewable Energy Laboratory's (NREL) Energy Analysis Office (EAO) in Washington, D.C. At NREL, Jenkin focuses on the economic and market analysis of renewable energy technologies, including R&D cost-benefit analysis. Prior to joining the Laboratory, Jenkin had nearly 10 years experience in economic and management consulting to the natural gas and power industry, most recently as a principal for LECG, based in Houston. His work has included valuing energy assets and contracts, using both an options framework and more conventional valuation techniques. He also has performed studies on the value of R&D and the commercialization of new technologies. Jenkin holds a master's degree in public and private management from the Yale School of Management, a doctorate in physics from Oxford University, and a B.Sc. in physics from Bristol University

Golden, Colo., information

1829 Denver West Drive, Golden, Colorado
Building 27, Conference Room 230 A/B

Please contact Lynne Fenn at lynne_fenn@nrel.gov or 303-384-7439

Washington, D.C., information

901 D Street SW (also the Aerospace Building, 370 L'Enfant Promenade), adjacent to the Forrestal Building

Please contact Wanda Addison at wanda_addison@nrel.gov or 202-646-5278

If you are interested in participating in the seminar via conference call, please contact Wanda Addison at **wanda_addison@nrel.gov** or **202-646-5278** for instructions.

EAO Energy Analysis Office
Understanding Energy Issues

For more information on NREL analysis, please visit the Web site at
http://www.nrel.gov/analysis